

REMARKS

I. STATUS OF THE CLAIMS

Claims 11-24 are pending and under consideration.

Claims 11 and 24 have been amended. Proper support for the amendment of claim 11 is found in the specification at least at page 12, lines 7-24.

Claim 11 is the independent claim.

No new matter is believed to have been added. Reconsideration is respectfully requested.

II. THE REJECTION UNDER 35 U.S.C. §112:

Claim 24 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 24 has been amended to correct its dependency.

Accordingly, Applicants respectfully request that the rejection of claim 24 under 35 U.S.C. §112, second paragraph be withdrawn.

III. THE REJECTION UNDER 35 U.S.C. §102:

Claims 11-20 are rejected under 35 U.S.C. §102(a) or (e) as being anticipated by Kweon et al. (U.S. Patent 6,183,911).

Applicants respectfully traverse this rejection for at least the following reason.

Independent claim 11 recites a method of preparing a positive active material for a rechargeable battery comprising, amongst other novel features, and drying the coated compound at a temperature where a conversion of a precursor to oxide occurs, **without heat-treating the coated compound.**

Kweon discloses a positive active material for rechargeable lithium batteries and a method of preparing the same (column 1, lines 7-11). The method includes obtaining a powder from a source material and coating the powder with a vanadium pentoxide aqueous solution or a

V₂O₅ alcoholic solution to make a V₂O₅ solution-coated powder. Thereafter, the V₂O₅ solution-coated powder is **heat-treated** to prepare a V₂O₅ coated active material (column 1, lines 50-63).

Accordingly, Kweon discloses a method for forming a positive active material for a rechargeable lithium battery along the lines as the one disclosed in the conventional art (see specification at page 12, lines 11-24), where the procedure includes a **mixing step**, a **drying step** and a **heat-treating step**, where the heat-treating step disclosed by Kweon is performed at a high temperature. Contrary to Kweon claim 11 recites, amongst other novel features, drying the coated compound at a temperature where a conversion of a precursor to oxide occurs, **without heat-treating the coated compound**.

Accordingly, Applicants respectfully assert that the rejection of claim 11 under 35 U.S.C. § 102(a) or (e) should be withdrawn because Kweon fails to teach or suggest each feature of independent claim 11, as amended.

Furthermore, Applicants respectfully assert that the rejection of dependent claims 12-20 under 35 U.S.C. § 102(a) or (e) should be withdrawn at least because of their dependence from claim 11 and the reasons set forth above, and because the dependent claims include additional features which are not taught or suggested by the prior art. Therefore, it is respectfully submitted that claims 12-20 also distinguish over the prior art.

Claims 11, 12, 15, 17 and 18 are rejected under 35 U.S.C. §102(b) as being anticipated by Wang (U.S. Patent 5,783,328).

Applicants respectfully traverse this rejection for at least the following reason.

Independent claim 11 recites a method of preparing a positive active material for a rechargeable battery comprising, amongst other novel features, and drying the coated compound at a temperature where a conversion of the precursor to oxide occurs, **without heat-treating the coated compound**.

Wang discloses a method of treating lithium manganese oxide. The method includes immersing in a lithium hydroxide solution at ambient temperature, lithium manganese oxide powder and stirring the mixture for sufficient time to saturate the powder with hydroxide. The solution is heated to evaporate substantially all the water contained therein leaving behind lithium hydroxide coated particles. The lithium hydroxide coated powder is exposed to an environment of carbon dioxide at a temperature between 200°C and 700°C. Such treatment removes any residual moisture from the coated powder (column 2, lines 30-44).

Accordingly, Wang discloses a method for forming a positive active material for a

rechargeable lithium battery along the lines as the one disclosed in the conventional art (see specification at page 12, lines 11-24). The conventional procedure includes a **mixing step**, a **drying step** and a **heat-treating step**.

Contrary to Wang, independent claim 11 recites, a method of preparing a positive active material for a rechargeable battery comprising, amongst other novel features, and drying the coated compound at a temperature where a conversion of the precursor to oxide occurs, **without heat-treating the coated compound**.

Accordingly, Applicants respectfully assert that the rejection of claim 11 under 35 U.S.C. § 102(b) should be withdrawn because Wang fails to teach or suggest each feature of independent claim 11, as amended.

Furthermore, Applicants respectfully assert that the rejection of dependent claims 12, 15, 17 and 18 under 35 U.S.C. § 102(b) should be withdrawn at least because of their dependence from claim 11 and the reasons set forth above, and because the dependent claims include additional features which are not taught or suggested by the prior art. Therefore, it is respectfully submitted that claims 12, 15, 17 and 18 also distinguish over the prior art.

IV. THE REJECTION UNDER 35 U.S.C. §103:

Claims 21-24 rejected under 35 U.S.C. §103(a) as being unpatentable over Wang.

Claims 21-24 depend from independent claim 11 and as noted above, Wang fails to teach or suggest each feature of independent claim 11.

Applicants respectfully assert that the rejection of dependent claims 21-24 under 35 U.S.C. § 103(a) should be withdrawn at least because of their dependence from claim 11 and the reasons set forth above, and because the dependent claims include additional features which are not taught or suggested by the prior art. Therefore, it is respectfully submitted that claims 21-24 also distinguish over the prior art.

V. DOUBLE PATENTING REJECTION

Claims 11-24 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of U.S. Patent Nos. 6,372,385; 6,183,911; 6,756,155; 6,531,220; 6,653,021; 6,753,111; 6,797,435 and 6,846,592.

Applicants respectfully traverse this rejection for at least the following reason.

The active materials according to the cited references form the metal oxide coating by heat-treating, which is different from the hydroxide coating of the present invention, which forms the coating without heat-treating.

Accordingly, Applicants respectfully assert that the rejection of claims 11-24 under the judicially created doctrine of obviousness-type double patenting should be withdrawn because none of the cited references teach or suggest the features of claims 11-24.

Furthermore, since claims 11-24 of the instant application have not yet been indicated as allowable, it is believed that any submission of a Terminal Disclaimer would be premature (see MPEP 804).

Claims 11-20 and 24 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of copending Application Nos. 09/429,262; 09/936,872; 09/966,572; 10/808,034 and 10/944,892.

Applicants respectfully traverse this rejection for at least the following reason.

The active materials according to the cited references form the metal oxide coating by heat-treating, which is different from the hydroxide coating of the present invention, which forms the coating without heat-treating.

Accordingly, Applicants respectfully assert that the rejection of claims 11-20 and 24 under the judicially created doctrine of obviousness-type double patenting should be withdrawn because none of the cited references teach or suggest the features of claims 11-20 and 24.

Furthermore, since claims 11-20 and 24 of the instant application have not yet been indicated as allowable, it is believed that any submission of a Terminal Disclaimer would be premature (see MPEP 804).

VI. CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 503333.

Respectfully submitted,

STEIN, MCEWEN & BUI, LLP

Date: 1/20/06

By: Douglas X. Rodriguez
Douglas X. Rodriguez
Registration No. 47,269

1400 Eye St., NW
Suite 300
Washington, D.C. 20005
Telephone: (202) 216-9505
Facsimile (202) 216-9510